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EDUCATION

2020 - Ph.D. in Communication Systems Engineering, Ben-Gurion University of the Negev, Israel.

- Advisor: Dr. Gabriel Scaolsub.
- Thesis: [Advanced Algorithms in Heterogeneous and Uncertain Networking Environments](#).

2008 - M.Sc. in Electrical Engineering, Technion, Israel Institute of Technology.

- Advisor: Prof. Isaac Keslassy.
- Thesis: [T-Plots: A Novel Approach to Network Design](#).

2003 - B.Sc. in Computer Engineering (cum laude), Technion, Israel Institute of Technology.

EMPLOYMENT

2022- 2023 Faculty member, School of Computer Science, Ariel University of the Samaria, Israel.

2020- 2022 Post-doctoral fellow, [Telecommunication Networks Group](#), Politecnico di Torino, Italy.

- Hosts: Prof. Carla Fabiana Chiasserini and Prof. Paolo Giaccone.

2019-2020 Post-doctoral fellow, Ben-Gurion University of the Negev, Israel.

- Hosts: Dr. Gil Einziger and Dr. Gabriel Scalosub.

2015-2020 Lecturer and teaching assistant, Ben-Gurion University of the Negev, Israel.

Notable courses include Introduction to Communication Networks, Digital Systems, Operating Systems, and Queueing Theory.

2008-2015 Lecturer and projects supervisor, Azrieli College of Engineering, Jerusalem.

Notable courses include Logic Design and CAD of VLSI Circuits. Notable projects include HW implementations of [QCN](#), [AFD](#), [Bloom filters](#), and [fast estimators](#). Notable bachelors are Dr. Deborah Pereg, and [Dr. Uzi Pereg](#).

2011-2012 Lecturer, Jerusalem College of Technology.

Notable courses include Matlab and Opnet Simulations of LAN, WLAN, and TCP/IP.

2004-2011 Teaching assistant, Bar-Ilan University, Israel. Notable courses include: Digital Systems, Electrical Switching Circuits, and Computer-Aided Design. Lab classes: Electrical Switching Circuits.

2003-2007 Teaching assistant, Technion, Israel Institute of Technology.

Responsibilities include supervising student projects and lab classes. Notable topics include [buffered crossbar](#), [construction of optical FIFO queue](#), and TCP simulations with Opnet.

Notable bachelors supervised are Dr. Ori Rottenstreich and [Dr. Yossi Kanizo](#).

- 2006-2007 Chip designer, EZchip Technologies, Israel.
Work included design and test of Network Processor blocks.
- 2005-2006 Research assistant, REMON project, Israel 4G Mobile Consortium.
Worked on Opnet simulations of handover mechanism at 802.16 (WiMax).
- 2003-2004 Test engineer, Marvell, Israel.
Worked on system controller, including electrical characterization, test definition and coverage, development and release of a final test program, yield analysis and test holes resolution.

PUBLICATIONS

Journals

1. I. Cohen, G. Einziger, M. Goldstein, Y. Sa'ar, G. Scalosub, and E. Waisbard, "[High throughput VMs placement with constrained communication overhead and Provable Guarantees](#)", accepted for publication, IEEE Transactions on Network and Service Management, 2023
2. I. Cohen, G. Einziger, G. Scalosub, "[False Negative Awareness in Indicator-Based Caching Systems, IEEE/ACM Transactions on Networking](#)", 30(6), pp. 2674-2687, 2022.
3. I. Cohen, G. Einziger, R. Friedman, and G. Scalosub, "[Access Strategies for Network Caching](#)", IEEE/ACM Transactions on Networking, 29(2), pp. 609-622, 2021.
4. I. Cohen, G. Scalosub, "[Queueing in the Mist: Buffering and Scheduling with Limited Knowledge](#)", Computer Networks 147, 204-220, 2018.
5. I. Cohen, O. Rottenstreich, and I. Keslassy, "[Statistical Approach to Networks-on-Chip](#)", IEEE Transactions on Computers 59 (6), 748-761, 2010.

Conferences

1. I. Cohen, Gil Einziger, and G. Scalosub, "[Self-adjusting Advertisement of Cache Indicators with Bandwidth Constraints](#)", IEEE Infocom, 2021, pp. 1-10.
2. I. Cohen, G. Einziger, M. Goldstein, Y. Sa'ar, G. Scalosub, and E. Waisbard, "[Parallel VM Deployment with Provable Guarantees](#)", IFIP Networking, 2021, pp. 1-9.
3. I. Cohen, Gil Einziger, and G. Scalosub "[On the Power of False Negative Awareness in Indicator-based Caching Systems](#)", IEEE ICDCS, 2021, pp. 45-56.
4. I. Cohen, G. Einziger, M. Goldstein, Y. Sa'ar, G. Scalosub, and E. Waisbard, "[Parallel VM Placement with Provable Guarantees](#)", IEEE Infocom Workshops 2020, pp. 1298-1299.
5. I. Cohen, G. Einziger, R. Friedman, and G. Scalosub, "[Access Strategies for Network Caching](#)", IEEE Infocom 2019, pp. 28-36.
6. I. Cohen and G. Scalosub, "[Queueing in the Mist: Buffering and Scheduling with Limited Knowledge](#)", ACM/IEEE IWQoS 2017, pp. 1-6.
7. S. Wimer, I. Koren, and I. Cohen, "[Adaptive Clock Gating for Shift Register Based Circuits](#)", IEEE Convention of Electrical and Electronics Engineers in Israel 2010, pp. 374-378.

8. I. Cohen, O. Rottenstreich, and I. Keslassy, "[Statistical Approach to NoC Design](#)", ACM/IEEE NoCS 2008, pp. 171-180.

Pre-prints

1. I. Cohen, C.F. Chiasserini, and P. Giaccone, "Distributed Protocol for Service Provisioning in the Edge-cloud Continuum with Minimal Communication Overhead".
2. I. Cohen, G. Einziger, and Roy Friedman, "Highly accurate number representation with flexible Counting ranges".
3. I. Cohen, "Self-Adjusting Scheme for Cache Selection".

SERVICE

- Reviewer at IEEE Transactions on Communications, IEEE Transactions on Networking, and PLOS ONE.
- Giving a workshop for new teaching assistants, Ben-Gurion University of the Negev, 2019.

SCHOLARSHIPS AND AWARDS

- 2019 Kreitman scholarship for distinguished post-doctoral fellows - Ben-Gurion University of the Negev, Israel.
- 2019 Award for distinguished teaching assistants - Ben-Gurion University of the Negev, Israel.
- 2012 Award for distinguished lecturers, Azrieli College of Engineering, Jerusalem.
- 2006 Cisco prize for distinguished students in the areas of the Internet and networking.
- 2005 Banin fund scholarship for distinguished students.

SKILLS

- Software: C, C++, Matlab, Python, Java. Tools: Eclipse, Opnet, Omnet++, [SUMO](#).
- Hardware: VHDL, Verilog. Tools: ModelSim simulator; Synthesis and verification tools by Synopsys and Cadence.